WHAT IS CLAIMED IS:

1. An amplification primer pair comprising an oligonucleotide anchor and primer, said anchor having a nucleic acid chemistry which is not a substrate for reverse transcriptases or DNA polymerases, and/or having a 3'-end which is not capable of priming nucleic acid synthesis;

wherein said primer has a nucleic acid chemistry that is a substrate for reverse transcriptases or DNA polymerases; and

wherein said anchor and said primer each include a region of complementary nucleotides which readily associate with each other to form a stem structure in the absence of a target nucleic acid, wherein the stem structure includes a region which is complementary to a universal primer.

2. The primer pair of Claim 1, wherein said anchor sequence and said stem regions are connected by a flexible linker.

3. The primer pair of Claim 2, wherein said flexible linker is selected from the group consisting of polyethylene glycol, polypropylene glycol, polyethylene, polypropylene, polyamides and polyesters.

4. The primer pair of Claim 1, wherein said primer comprises a tail region which extends beyond the length of said stem region of said anchor.

5. The primer pair of Claim 1, wherein said primer comprises one or more modified bases.

6. The primer pair of Claim 1, wherein said anchor comprises one or more modified backbone linkages.

7. The primer pair of Claim 1, wherein said anchor and said primer are each between 6 and 24 bases in length.

8. The primer pair of Claim 1, further in association with a universal primer which is complementary to a region of said stem structure.

9. A sequencing primer pair comprising an oligonucleotide anchor and primer, said anchor having a nucleic acid chemistry which is not a substrate for reverse transcriptases or DNA polymerases, and/or having a 3'-end which is not capable of priming nucleic acid synthesis;

wherein said primer has a nucleic acid chemistry that is a substrate for reverse transcriptases or DNA polymerases; and

wherein said anchor and said primer each include a region of complementary nucleotides which readily associate with each other to form a stem structure in the absence of a target nucleic acid.

10. The primer pair of Claim 9, wherein said stem structure includes a region which is complementary to a universal primer.

11. The primer pair of Claim 10, wherein said anchor sequence and said stem region are connected by a flexible linker.

12. The primer pair of Claim 11, wherein said flexible linker is selected from the group consisting of polyethylene glycol, polypropylene glycol, polyethylene, polypropylene, polyamides and polyesters.

13. The primer pair of Claim 10, wherein said primer comprises a tail region which extends beyond the length of said stem region of said anchor.

14. The primer pair of Claim 9, wherein said primer comprises one or more modified bases.

15. The primer pair of Claim 9, wherein said anchor comprises one or more modified backbone linkages.

16. The primer pair of Claim 9, wherein said anchor and said primer are each between 6 and 24 bases in length.

17. The primer pair of Claim 9, further in association with a universal primer which is complementary to a region of said stem structure.

18. A method for amplifying a target nucleic acid sequence, comprising the steps of: combining said target nucleic acid sequence a forward anchor (FA), forward primer (FP), reverse anchor (RA), reverse primer (RP), forward universal primer (FUP) and reverse universal primer (RUP), wherein said FA/FP readily associate to form a first primer pair and said RA/RP readily associate to form a second primer pair via association of their complementary stem regions in the absence of said target nucleic acid, wherein said FUP is complementary to the FA/FP stem region, and wherein said RUP is complementary to the RA/RP stem region wherein said primer

pairs are selected on the basis of complementarity to said target nucleic acid sequence to flank said target nucleic acid sequence; and

amplifying said nucleic acid sequence via enzyme-mediated amplification.

19. The method of Claim 18, wherein said nucleic acid sequence encodes a therapeutic gene product.

20. The method of Claim 18, wherein said nucleic acid sequence is DNA or RNA.

21. The method of Claim 18, wherein said enzyme-mediated amplification is PCR amplification.